



A new record of *Rondonops biscutatus* (Reptilia, Sauria, Gymnophthalmidae) from Mato Grosso, Brazil

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Abstract

Rondonops biscutatus is a Iphisini species known from the southwestern portion of the Brazilian Amazon forest, in the states of Mato Grosso, Pará and Rondônia. In this study, we report the second known locality for the species in Mato Grosso, extending the distribution of the species approximately 545 km.

Key words

Vila Rica; geographical distribution; Amazon rainforest.

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Introduction

Rondonops Colli et al., 2015 is a recently described genus within the Iphisini clade, which occurs in the Brazilian Amazon Forest and comprises two species: *Rondonops biscutatus* Colli et al., 2015 and *Rondonops xanthomystax* Colli et al., 2015.

Although recently described, *R. biscutatus* has been previously cited in past works. Gainsbury and Colli (2003) reported the species as Gymnophthalmidae sp. Hoogmoed et al. (2007) and Garda et al. (2013) reported it as *Colobosaura* sp. and Gymnophthalmidae sp., respectively (Colli et al. 2015). According to Garda et al. (2013), who studied the effects of microhabitat variation on lizard distribution in a *terra firme* (non-floodable forests) forest

in Guajará-Mirim (Rondônia state), *R. biscutatus* is associated with sites distant from large trees, with few fallen logs and burrows, less canopy cover, thicker understory, thinner leaf litter, and numerous termite nests.

Rondonops biscutatus presents a wider geographic distribution than *R. xanthomystax*, occurring in the southwestern Amazon Forest, in the states of Mato Grosso, Pará and Rondônia. It is an inhabitant of leaf litter in *terra firme*, riparian and seasonally flooded forests, as well as in transitional areas between Amazonia and Cerrado (Colli et al. 2015, Moraes et al. 2016). Its distribution encompasses an area of 90.674.1 km², of which nearly 55% is located within protected areas, while about 22% has been deforested (Ribeiro-Júnior and Amaral 2016). Here, we present a new record for *R. biscutatus* in the state of Mato

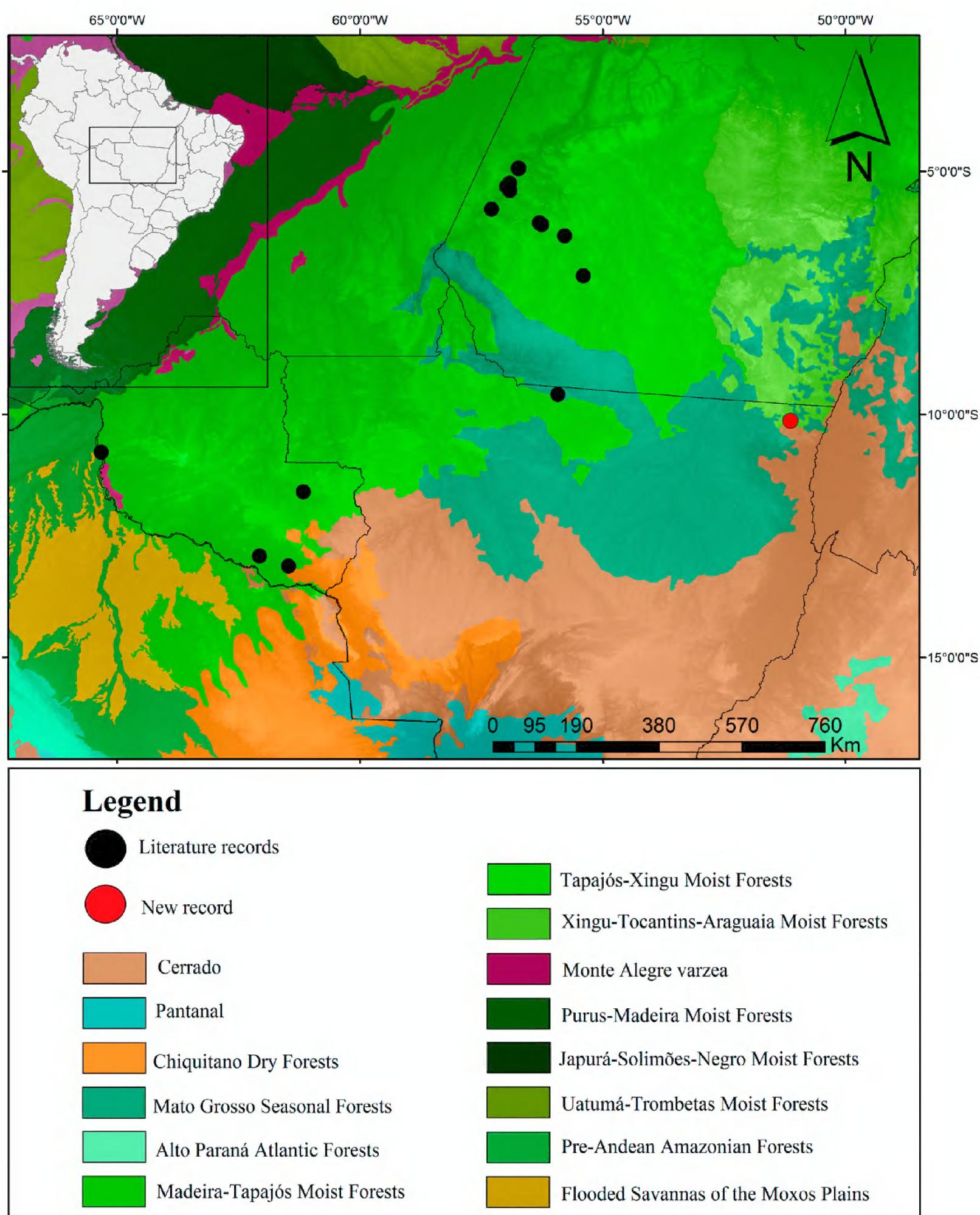


Figure 1. Distribution map for *Rondonops biscutatus*, with the new record (red circle) in Vila Rica, Mato Grosso, Brazil. Black circles represent literature records.

Grosso, extending its distribution approximately 545 km east of its nearest locality and establishing the eastern-most known locality of occurrence for this species.

Methods

The new record was made based on a specimen collected at the municipality of Vila Rica ($-10.1258, -051.1369$; 220 m; geodetic datum, WGS84) (Fig. 1), state of Mato Grosso, west-central Brazil, on 9 May 2014, during a faunal monitoring program for the BR-158/MT highway. The individual was captured in a pitfall trap (collecting permit SISBio 2004-53), euthanized and deposited in the herpetological collection of Pontifícia Universidade

Católica do Rio Grande do Sul (Accession number MCP 19465) (Fig. 2).

Results

The specimen is identified based on morphological analysis using literature data. According to original description (Colli et al. 2015), the genus is morphologically distinctive and easily distinguished from all other genera of Gymnophthalmidae, by having very wide, smooth, and imbricate nuchal scales, arranged in 2 longitudinal and 6–10 transverse rows from nape to brachium level, followed by much narrower, strongly keeled, lanceolate, and mucronate scales.



Figure 2. Specimen of *Rondonops biscutatus* MCP 19465 collected in the municipality of Vila Rica ($-10^{\circ}12'58''$, $-51^{\circ}13'69''$), state of Mato Grosso, Brazil.

Rondonops biscutatus is easily distinguished from *R. xanthomystax* by its supralabials with dark brown pigmentation (versus bright orange and yellow coloration on most of the supralabials, infralabials, and ventral surfaces of head and throat in *R. xanthomystax*). In addition, scales on sides of neck are smooth in *R. biscutatus* (versus keeled in *R. xanthomystax*). The specimen's morphology is in accordance with the diagnosis presented by Colli et al. (2015) for *R. biscutatus*.

Discussion

According to Colli et al. (2015), *R. biscutatus* differs from *R. xanthomystax* in habitat use: *R. biscutatus* is a leaf litter inhabitant, as are most gymnophthalmid lizards, while *R. xanthomystax* occurs in other habitats. In addition, *R. biscutatus* can occur in both forests and areas of open vegetation, while *R. xanthomystax* is restricted to forested areas. Our record of *R. biscutatus* supports this; Vila Rica is located in a transitional area between Amazonia and Cerrado (Fig. 1) and other specimens (uncollected) were observed in the leaf litter there.

The discovery of a new population of *R. biscutatus* approximately 545 km from the nearest locality (municipality of Alta Floresta, Mato Grosso), reinforces that this species has a wider geographic distribution than we currently know. However, its distribution encompasses the “arc of deforestation”, an expanding area of continuous deforestation, located in southwestern Maranhão, northern Tocantins, Mato Grosso and Rondônia, southern Pará and Amazonas and southeastern Acre (Brooks et al. 2002, Ferreira et al. 2005, Colli et al. 2015). Although a large portion of the *R. biscutatus* occurrence area is within

protected areas (Ribeiro-Júnior and Amaral 2016), these populations might be exposed to strong ecological pressures resulting from anthropogenic influence, especially those resulting in changes of natural environments, forest fragmentation, and habitat loss (Ribeiro-Júnior and Amaral 2016).

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Authors' Contributions

FPRS collected the specimen in the field; ADA, OME-N and LMB wrote the manuscript.

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